Running Time
ArrayList, LinkedList and IntSearchTree (time to add n elements)
ArrayList IntSearchTree (time to add n elements)
Benchmarking

• Running a program to see how long it takes
• Downsides:
Running Time Analysis

• Count the number of “primitive operations” the code will do
  • Expressed in terms of the size of the input (typically called $n$)

• Put that count into a “bucket” to categorize its running time
  • To find bucket: ignore all constant coefficients, ignore all terms except the biggest one containing $n$

• Examples of buckets:
  • $O(1)$: constant
  • $O(n)$: linear
  • $O(n^2)$: quadratic